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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/813,368 Filing Date: March 30, 2004 Appellant(s): HATFIELD ET AL.

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Patrick S. Yoder For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 30, 2007 appealing from the Office action mailed September 27, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,182,432	LANGE et al	1-1993
6,150,927	NESBITT	11-2000
6,794,882	JESSUP	9-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-10, 12-22 and 24-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lange et al. (US Pat. 5,182,432) in view of Jessup (US Pat. 6,794,882 B2) in view of Nesbitt (US Pat. 6,150,927).

In reference to claim 1, 4, 8-10, 12, 17-22, 24, 26-29, 33, 34, Lange discloses a) the claimed lamp assembly comprising a housing and a lamp disposed in the housing, a lens disposed adjacent to the lamp, which is met by a motor vehicle headlight having an enclosing light transmissive shield B (lens) (col. 1, lines 62-68), b) the claimed lens comprising a conductor adapted to loose electrical continuity upon occurrence of a crack in the lens, which is met by at least one electrically conductive heating element H arranged "in or on" the light-transmissive shield B (lens) (col. 1, lines 62-68; Figure 1), and c) the claimed monitoring system coupled to the conductor and configured to detect the loss of electrical continuity in the conductor, which is met by analyzing apparatus A for monitoring the heating element H to determine whether it's broken (col. 2, lines 27-35; col. 3, lines 3-26). Although Lange does not disclose the claimed

system for transmitting a signal to a remote location, representative of a state of continuity of the conductor, he does disclose a monitoring system including an analyzing apparatus A for determining whether a crack, or a break of the light-transmissive shield B has taken place within a motor vehicle headlight (col. 3, lines 3-48). Jessup discloses a system that detects breakage of a vehicle's window by a rupture detector 10. Upon detecting that a rupture has taken place, an alarm mechanism 32 initiates an alarm (col. 5, lines 10-55); col. 6, lines 44-58). Nesbitt discloses a system in which a tear, scratch or break in glass or other types of material can be determined by sensing the conductors within the material. Upon detection of a signal change characteristic of a tear or a cut being made in the glass or seat of a vehicle, the computer 50 initiates operation of the local and remote reporter devices (col. 3, lines 34-50; col. 4, lines 13-40, col. 5, lines 36-52). Since Lange discloses a system that detects a break in the lens of a vehicle's headlamp, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of notifying the driver of the rupture, as disclosed by Jessup, as well as transmitting the signal to a remote location, as disclosed by Nesbitt, to ensure that the interested persons are notified of the ruptured or broken lens and can replace the lens.

In reference to claims 2, 3, 13, 14, 30, 31, although Lange does not specifically disclose the claimed lens comprising glass or polymeric material, he does disclose a headlight including a light-transmissive shield B (lens) that includes an attached conductive element for monitoring a crack within the shield B (col. 1, lines 63-68). Since it is well known in the art to use either glass of some form of plastic material such as polymeric for manufacturing vehicle lamps, it would have been obvious to one of ordinary skill in the art at the time of the invention to use either

glass or polymeric as a material for the lens or any material that deems proper for allowing light to transmit through the vehicle light housing.

In reference to claims 5, 15, 25, 32, Lange discloses the claimed conductive wire, which is met by at least one electrically conductive heating element H (col. 1, lines 63-68).

In reference to claims 6, 16, Lange does not disclose the claimed conductor comprising a decal configured to be disposed on a surface of the lens. Jessup discloses a rupture detector used for a windshield of a vehicle. Specifically, a windshield assembly 12 includes at least one transparent member 14 forming a strip or band of conductive material around the major surface of a vehicle window and may be adhered to the window by an attachment mechanism 64 via a clamping action, adhesive or other method of fixation (col. 3, lines 56-67, col. 7, lines 31-42). Since both Lange and Jessup discloses systems that detect a fracture or crack within a lens/glass by use of a torn or broken conductor, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of an attachment means, as disclosed by Jessup, with the system of Lange, that comprises a decal disposed on the surface of the lens to form a retrofitted device that can be applied at anytime to any location after manufacture of the lens.

In reference to claim 7, Lange discloses the claimed conductor is embedded in the lens, which is met by electrically conductive heating element H arranged "in" or on the light-transmissive shield B (col. 1, lines 62-68).

(10) Response to Argument

The Appellant argues that "Lange does not suggest or contemplate the possibility of transmitting or communicating a signal to a remote location, representative of a state of the motor vehicle headlight"; Jessup "fails to suggest or teach transmitting a signal indicative of a state of the lighting system to a remote location", and with respect to Nesbitt, "there is no suggestion... to relate to detection of a crack in a lens"...."Nesbitt does not consider breakage of a headlamp as warranting remote communication as it does not constitute intrusion or vandalism". Further stated by the Appellant, "There is no reasonable basis for the hypothetical combination proposed by the Examiner."

When separating each of the references as the Appellant has in the Appeal Brief, neither meet the claims as a whole. However, as in the Final Office Action above, it would have been obvious to one of ordinary skill in the art to combine the references such that as a whole, they read on the claims.

Specifically, the primary reference Lange discloses a system in which a crack is detected in a headlight (lens), the lens comprises a conductor that informs the monitoring unit of breakage of the headlight (lens) when the conductor is torn.

Lange does not disclose the claimed communication system for transmitting a signal to a remote location. A secondary reference Jessup discloses a system that detects breakage of a vehicle's window by a rupture detector 10. Upon detecting that a rupture has taken place, an alarm mechanism 32 initiates an alarm. Both Lange and Jessup are concerned with detecting breakage of glass within or attached to a vehicle, with Jessup further teaching the concept of providing an alarm that is attached to the monitoring system to allow the driver to be notified of

the ruptured window. Since Lange includes a system that includes a monitoring system that determines that a lens has been cracked, it would have been obvious to one skilled in the art that a driver or any other party (mechanic) will want to be alerted to the monitored conditions of the headlight so that the cracked headlight can be fixed.

Neither Lange nor Jessup disclose the claimed alarm signal being transmitted to a remote location. Therefore, the reference Nesbitt is brought in to teach a system in which a tear, scratch or break in glass or other types of material can be determined by sensing the conductors within the material. Upon detection of a signal change characteristic of a tear or a cut being made in the glass or seat of a vehicle, the computer 50 initiates operation of the local and remote reporter devices. Again, even the third reference used (Nesbitt) is within the same background and technology as both Lange and Jessup in that they are all concerned with monitoring a crack, rupture, or breakage of glass within or on a vehicle. Both Jessup and Nesbitt disclose alarms that are actuated upon detecting the breakage, with Nesbitt teaching a "communication system for transmitting a signal to a remote location". Since Lange discloses a system that includes a conductor attached to a lens to monitor breakage, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of providing an alarm upon the detection of breakage of lens, as disclosed by Jessup's alarm given upon rupture of glass, as well as providing a communication system that will transmit a signal to a remote location, as disclosed by Nesbitt, to provide a well-known modern method of communication used within the art of car systems that notify the driver "remotely" of any faulty condition, including breakage of a vehicle's lens that has been detected by the driver's vehicle.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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